



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,677	02/04/2002	Colleen A. Roe	1098-011/MMM	7121
21034	7590	08/09/2005	EXAMINER	
IPSOLON LLP 805 SW BROADWAY, #2740 PORTLAND, OR 97205			HO, ANDY	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/067,677

Applicant(s)

ROE ET AL.

Examiner

Andy Ho

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to the amendment filed 5/12/2005.
2. Claims 1-21 have been examined and are pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller U.S Patent No. 5,878,228 in view of Lipkin U.S Patent No. 6,721,747.

**As to claim 1**, Miller teaches a scalable agent service scheduling method (Fig. 10) to perform tasks (downloading data to the clients, lines 61-63 column 2) for plural client computation devices (client devices 14, line 56 column 4), the method comprising:

obtaining an isochronal table (PDU scheduling queue 32, line 23 column 10) of plural activation times over a recurring time period at which periodic tasks can be activated (...at periodic intervals, according to the minimum granularity of the timer 30 used by the PDU Scheduler 28, each timeslot 34 in the PDU scheduling queue 32 is checked, in sequence, for any download records 36 to be serviced..., lines 45-48 column 10), the isochronal table including a predefined time interval (time slots 34, Fig. 10) between each of the successive activation times (lines 26-35 column 10),

characterizing each periodic task as including an initial task and one or more successive tasks to be activated periodically (... each of the time slot 34 is a data structure formatted as a list of download records 36, one is executed before the another..., lines 27-28 column 10, Fig. 10), the initial task having an initial event time (download record 36 in time slot 34 is being serviced at a particular time, lines 45-48 column 10);

applying the initial event time of the initial task of each periodic task to a corresponding activation time in the isochronal table (...at periodic intervals, according to the minimum granularity of the timer 30 used by the PDU Scheduler 28, each timeslot 34 in the PDU scheduling queue 32 is checked, in sequence, for any download records 36 to be serviced..., lines 45-48 column 10);

determining a skipping interval representing a number of activation times in the isochronal table (multiple time slots 34 in the PDU scheduling queue 32 are being defined, lines 26-28 column 10) corresponding to the period at which each of the one or more successive tasks of a periodic task are to be activated periodically (...at periodic intervals, according to the minimum granularity of the timer 30 used by the PDU Scheduler 28, each timeslot 34 in the PDU scheduling queue 32 is checked, in sequence, for any download records 36 to be serviced..., lines 45-48 column 10),

storing at activation times determined by the skipping interval the one or more successive tasks of each periodic task to be activated periodically (download records 36 are stored in each of the time slots 34, Fig. 10),

Art Unit: 2194

passing as one or more batches the tasks for each activation time for processing when the activation time occurs (...if there are download records 36 present, each download record 36 in turn is retrieved and serviced..., lines 53-54 column 10). Miller does not explicitly teach computer software agents.

Lipkin teaches (lines 2-19 column 138) a system of delivery information between a server and clients wherein multiple agents are used in order to send the data to the clients. Lipkin further suggests that the agents could be triggered on a regularly scheduled basis (lines 26-28 column 138). It would have been obvious to apply the teachings of Lipkin to the system of Miller because the agents would provide a much more flexible and sophisticated manner when it comes to searching and discovering information to be sent to the clients as disclosed by Lipkin (lines 9-25 column 2).

**As to claim 2,** Miller as modified further teaches queuing independently from the isochronal table the tasks that are passed as a batch for each activation time for processing (queuing system, lines 26-35 column 10).

**As to claim 3,** Miller as modified further teaches providing selected non-periodic spontaneous tasks to plural client computation devices at respective ones of the activation times (...if the request is for a filesize, the available filesystem on the primary storage 20 is searched for the file. If the file is found, a filesize response is constructed by the Request Handler 26 and sent, containing the size of the file. If the file is not found, a filesize response is still constructed and sent, but contains a filesize of zero. It is noted that a file of size zero is not downloadable..., lines 15-21 column 9).

**As to claim 4**, Miller as modified further teaches the selected non-periodic spontaneous tasks correspond to spontaneous events (client request for filesize, line 15 column 9) that are suitable for receiving delayed processing according to a predefined rule and are distinguished from spontaneous tasks that require immediate processing according to the predefined rule (lines 15-21 column 9).

**As to claim 5**, it is a method claim of claims 2 and 4. Therefore, it is rejected for the same reasons as claims 2 and 4 above.

**As to claim 6**, it is a method claim of claim 3. Therefore, it is rejected for the same reasons as claim 3 above.

**As to claim 7**, it is a method claim of claims 2 and 4. Therefore, it is rejected for the same reasons as claims 2 and 4 above.

**As to claim 8**, Miller does not explicitly teach the recurring time period of the isochronal table is one hour. However, Miller teaches (lines 45-52 column 10) the recurring time period of the scheduling table is based on a timer. The timer sets a minimum time for each timeslots in the scheduling queue to be checked, in sequence, for any download records to be serviced. Therefore one of ordinary skill in the art would conclude that the timer could be set to any particular time, may be one hour, before the next recurring time of the scheduling table.

**As to claim 9**, Miller does not explicitly teach the recurring time period of the isochronal table is 24 hours. However, Miller teaches (lines 45-52 column 10) the recurring time period of the scheduling table is based on a timer. The timer sets a minimum time for each timeslots in the scheduling queue to be checked, in sequence,

for any download records to be serviced. Therefore one of ordinary skill in the art would conclude that the timer could be set to any particular time, may be 24 hours, before the next recurring time of the scheduling table.

**As to claims 10-15**, they are computer program product claims of claims 1-6, respectively. Therefore, they are rejected for the same reasons as claims 1-6 above.

**As to claim 16**, it is a system claim of claims 1 and 2. Therefore, it is rejected for the same reasons as claims 1 and 2 above. Miller as modified further teaches an isochronal scheduler (scheduler 28, line 3 column 9) and a dispatcher (each download record in turn is retrieved and serviced, lines 53-54 column 10).

**As to claim 17**, it is a system claim of claims 1-2 and 16. Therefore, it is rejected for the same reasons as claims 1-2 and 16 above.

**As to claims 18-21**, they are system claims of claims 1, 3-4 and 6, respectively. Therefore, they are rejected for the same reasons as claims 1, 3-4 and 6 above.

### ***Response to Arguments***

4. Applicant's arguments filed 5/12/2005 have been fully considered but they are not persuasive.

Applicant argued that Miller reference does not teach applying a scheduler to the operation of service agents (Remarks, last complete paragraph page 8). In response, the applicant argued new limitation that was not claimed before. However, this new limitation is still met by the cited references as disclosed in the claim rejections above. Lipkin teaches a system of delivery information between a server and clients wherein

Art Unit: 2194

multiple agents are used in order to send the data to the clients and the agents could be triggered on a regularly scheduled basis (lines 26-28 column 138).

Applicant argued that Lipkin reference does not teach operation of a data transfer server (Remarks, last incomplete paragraph page 8 continue to page 9). In response, Lipkin clearly disclose a system of delivery data from a server to its clients (Fig. 4; lines 2-19 column 138).

Applicant argued that Miller and Lipkin references relate to different computing functions (Remarks, first complete paragraph page 9). In response, both of Miller and Lipkin references disclose similar systems wherein a server sending data to its clients (Fig. 7 of Miller reference; Fig.4 of Lipkin reference). Moreover, as disclosed above, Lipkin suggests applying scheduling into the operation of agents who perform the tasks (lines 26-28 column 138). Therefore, it is obvious to combine these two references based on the reasons as disclosed in the claim rejection above.

Applicant argued that Miller and Lipkin references do not suggest scheduling the operation of the agents (Remarks, first complete paragraph page 9). Again, as disclosed above, Lipkin suggests applying scheduling into the operation of agents who perform the tasks (lines 26-28 column 138). The reference meets the limitation as claimed.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2194

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.
- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H

August 4, 2005

  
MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER